Author Index

Abe, H.
--, Yokota, Y. and Okabe, K.
Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimetylamine 171
Acharya, D.R.
--, Hughes, R. and Li, K.
Deactivation of silica-alumina catalyst during the cumene cracking reaction 115

B-Son Bredenberg, J., see Toropainen, P. 57
B-Son Bredenberg, J., see Vuori, A. 41
Baba, T.
--, Nakano, K., Nishiyama, S., Tsuruya, S. and Masai, M.
Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy 81
Blaser, H.U.
--, Jalett, H.P., Monti, D.M. and Wehrli, J.T.
Enantioselective hydrogenation of α-keto esters: Temperature-programmed reduction study of liquid-phase Pt/Al_2O_3 hydrogenation catalysts 19
Breysse, M., see Ramirez, J. 211

Chang, S.-H., see Huang, T.-J. 157

Derouane, E.G.
-- and Nagy, J.B.
Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" 169
Diaz, G., see Ramirez, J. 211
Donnelly, T.J.
-- and Satterfield, C.N.
Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts 93
Dufresne, L., see Le Van Mao, R. 1

El-Nabarawy, T., see El-Shobaky, G.A. 33
El-Shobaky, G.A.
--, El-Nabarawy, T. and Fagal, G.A.
Effect of sodium oxide-doping on surface and catalytic properties of CuO/Al_2O_3 solids 33

Fagal, G.A., see El-Shobaky, G.A. 33
Fígoli, N.S., see Querini, C.A. 249
Fuentes, S., see Ramirez, J. 211

Helenius, A., see Vuori, A. 41
Huang, T.-J.
--, Yu, T.-C. and Chang, S.-H.
Effect of calcination atmosphere on CuO/γ-Al_2O_3 catalyst for carbon monoxide oxidation 157
Hughes, R., see Acharya, D.R. 115

Jalett, H.P., see Blaser, H.U. 19

Kärger, J.
-- and Ruthven, D.
Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" 165
Korf, S.J., see Roos, J.A. 131
Korf, S.J., see Roos, J.A. 147
Kotter, M.
--, Lintz, H.-G., Turek, T. and Trimm, D.L.
Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia 225

Lacroix, M., see Ramirez, J. 211
Le Van Mao, R.
-- and Dufresne, L.
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane stream-cracker 1
Lee, J.-F.
--, Lee, M.-D. and Tseng, P.-K.
Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties 193
Lee, M.-D., see Lee, J.-F. 193
Li, K., see Acharya, D.R. 115
Lintz, H.-G., see Kotter, M. 225

Masai, M., see Baba, T. 81

Matsuzaki, I., see Nakajima, T. 237
McCulloch, A., see Rowley, L. 69
Meriaudeau, P., see Primet, M. 263
Mishima, S., see Nakajima, T. 237
Monti, D.M., see Blaser, H.U. 19
Nagy, J.B., see Derouane, E.G. 169
Nakajima, T.
--, Tanabe, K., Yamaguchi, T., Matsuzaki, I. and Mishima, S.
Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism 237
Nakano, K., see Baba, T. 81
Nishiyama, S., see Baba, T. 81

Okabe, K., see Abe, H. 171

Parera, J.M., see Querini, C.A. 249
Primet, M.
-- and Meriaudeau, P.
Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature 263

Querini, C.A.
--, Fígoli, N.S. and Parera, J.M.
Hydrocarbon reforming on Pt-Re-S/Al_2O_3-Cl coked in a commercial reactor 249

Ramirez, J.
--, Fuentes, S., Diaz, G., Vrinat, M., Breysse, M. and Lacroix, M.
Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina-, silica-alumina- and titania-supported catalysts 211
Roos, J.A.
--, Korf, S.J., Veehof, R.H.J., Van Ommen, J.G. and Ross, J.R.H.
Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst 131
Roos, J.A.
--, Korf, S.J., Veehof, R.H.J., Van Ommen, J.G. and Ross, J.R.H.
Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst. Factors affecting the rate of total oxidation of ethane and ethylene 147
Ross, J.R.H., see Roos, J.A. 131
Ross, J.R.H., see Roos, J.A. 147
Rowley, L.
--, Webb, G., Winfield, J.M. and McCulloch, A.
Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts 69
Ruthven, D., see Kärger, J. 165

Satterfield, C.N., see Donnelly, T.J. 93

Tanabe, K., see Nakajima, T. 237
Toropainen, P.
-- and B-Son Bredenberg, J.
Catalytic hydrogenolysis of heteroatom-substituted benzenes 57
Trimm, D.L., see Kotter, M. 225
Tseng, P.-K., see Lee, J.-F. 193
Tsuruya, S., see Baba, T. 81
Turek, T., see Kotter, M. 225

Van Ommen, J.G., see Roos, J.A. 131
Van Ommen, J.G., see Roos, J.A. 147
Veehof, R.H.J., see Roos, J.A. 131
Veehof, R.H.J., see Roos, J.A. 147
Vrinat, M., see Ramirez, J. 211
Vuori, A.
--, Helenius, A. and B-Son Bredenberg, J.
Influence of sulphur level on hydrodeoxygenation 41

Walendziewski, J.
Thermal stability of Co-Mo/Al_2O_3 hydrodesulphurization catalyst 181
Webb, G., see Rowley, L. 69
Wehrli, J.T., see Blaser, H.U. 19
Winfield, J.M., see Rowley, L. 69

Yamaguchi, T., see Nakajima, T. 237
Yokota, Y., see Abe, H. 171
Yu, T.-C., see Huang, T.-J. 157

Subject Index

Adsorption
Influence of sulphur level on hydrodeoxygenation 41
Adsorption
Catalytic hydrogenolysis of heteroatom-substituted benzenes 57
Adsorption
Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts 69
Adsorption
Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" 165
Adsorption
Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" 169
Ageing
Influence of sulphur level on hydrodeoxygenation 41
Ageing
Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts 69
Ageing
Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts 93
Ageing
Structure and selectivity changes in vanadia–titania catalysts used to promote the reduction of nitric oxide with ammonia 225
Amination catalysts
Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine 171
Anisole
Influence of sulphur level on hydrodeoxygenation 41
Aromatization
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover: Aromatizing the outstream gases of a propane steam-cracker 1

Bentonite
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover: Aromatizing the outstream gases of a propane steam-cracker 1
BTX
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover: Aromatizing the outstream gases of a propane steam-cracker 1

Carbon monoxide adsorption
Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature 263
Carbon monoxide oxidation
Effect of calcination atmosphere on CuO/γ-Al_2O_3 catalyst for carbon monoxide oxidation 157
Catalyst characterization (BET, SEM, XRD, porosimetry)
Structure and selectivity changes in vanadia–titania catalysts used to promote the reduction of nitric oxide with ammonia 225
Catalyst characterization (DTA, TG, SEM, XRD)
Thermal stability of Co–Mo/Al_2O_3 hydrodesulphurization catalyst 181
Catalyst characterization (FTIR)
Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature 263
Catalyst characterization (spectroscopic techniques)
Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination

of its active sites by infrared spectroscopy 81
Catalyst characterization (temperature-programmed techniques)
Enantioselective hydrogenation of α-keto esters: Temperature-programmed reduction study of liquid-phase Pt/Al_2O_3 hydrogenation catalysts 19
Catalyst characterization (temperature-programmed techniques)
Conversion of ethanol to acetone over zinc oxide–calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism 237
Catalyst characterization (temperature-programmed techniques)
Hydrocarbon reforming on Pt–Re–S/Al_2O_3–Cl coked in a commercial reactor 249
Catalyst characterization (XPS, HREM)
Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt–molybdenum catalysts: Comparison of alumina-, silica–alumina- and titania-supported catalysts 211
Catalyst preparation (kneading)
Thermal stability of $Co–Mo/Al_2O_3$ hydrodesulphurization catalyst 181
Catalyst preparation (kneading)
Conversion of ethanol to acetone over zinc oxide–calcium oxide catalyst: Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism 237
Chromia
Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts 69
Cobalt–molybdenum
Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt–molybdenum catalysts. Comparison of alumina-, silica–alumina- and titania-supported catalysts 211
Cobalt–molybdenum/alumina
Influence of sulphur level on hydrodeoxygenation 41
Cobalt–molybdenum/alumina
Catalytic hydrogenolysis of heteroatom-substituted benzenes 57
Cobalt–molybdenum/alumina
Thermal stability of $Co–Mo/Al_2O_3$ hydrodesulphurization catalyst 181
Coke formation
Influence of sulphur level on hydrodeoxygenation 41
Coke formation
Deactivation of silica–alumina catalyst during the cumene cracking reaction 115
Coke formation
Hydrocarbon reforming on Pt–Re–S/Al_2O_3–Cl coked in a commercial reactor 249
Confinement effects
Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" 165
Confinement effects
Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" 169
Copper oxide/alumina
Effect of sodium oxide-doping on surface and catalytic properties of CuO/Al_2O_3 solids 33
Copper oxide/alumina
Effects of calcination atmosphere on CuO/γ-Al_2O_3 catalyst for carbon monoxide oxidation 157
Copper–nickel–barium stearate
Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine 171
Crystallization
Effect of sodium oxide-doping on surface and catalytic properties of CuO/Al_2O_3 solids 33
Cumene cracking
Deactivation of silica–alumina catalyst during the cumene cracking reaction 115

Deactivation
Deactivation of silica–alumina catalyst during the cumene cracking reaction 115
Deactivation
Hydrocarbon reforming on Pt–Re–S/Al_2O_3–Cl coked in a commercial reactor 249

Diffusion
Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" 165
Diffusion
Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" 169
Dimerization
Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy 81
Dimethylamine
Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine 171
Dimethyldodecylamine
Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine 171
Dodecyl alcohol
Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine 171

Enantioselectivity
Enantioselective hydrogenation of α-keto esters: Temperature-programmed reduction study of liquid-phase Pt/Al_2O_3 hydrogenation catalysts 19
Ethanol conversion
Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism 237

Fischer-Tropsch synthesis
Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts 93
Fischer-Tropsch synthesis
Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties 193

Halogen-exchange
Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts 69
Heteroatom-substituted benzenes
Catalytic hydrogenolysis of heteroatom-substituted benzenes 57
Hydrocarbon reforming
Hydrocarbon reforming on Pt-Re-S/Al_2O_3-Cl coked in a commercial reactor 249
Hydrodeoxygenation
Influence of sulphur level on hydrodeoxygenation 41
Hydrodesulphurization
Thermal stability of Co-Mo/Al_2O_3 hydrodesulphurization catalyst 181
Hydrodesulphurization
Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina-, silica-alumina- and titania-supported catalysts 211
Hydrogen back-spillover
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker 1
Hydrogenolysis
Catalytic hydrogenolysis of heteroatom-substituted benzenes 57

Iron/alumina
Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties 193
Iron/silica
Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts 93
Iron/silica
Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties 193

Keto esters
Enantioselective hydrogenation of α-keto esters: Temperature-programmed reduc-

tion study of liquid-phase Pt/Al_2O_3 hydrogenation catalysts 19
Kinetics
Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst 131
Kinetics
Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst: Factors effecting the rate of total oxidation of ethane and ethylene 147

Lithium oxide/magnesia
Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst 131
Lithium oxide/magnesia
Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst: Factors effecting the rate of total oxidation of ethane and ethylene 147

Methane oxidative coupling
Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst 131
Molecular sieves
Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" 165
Molybdenum
Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina-, silica-alumina- and titania-supported catalysts 211
Naphtha reforming
Hydrocarbon reforming on Pt-Re-S/Al_2O_3-Cl coked in a commercial reactor 249
Nitric oxide reduction
Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia 225

Oxidative coupling
Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst 131
Oxidative coupling
Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst. Factors effecting the rate of total oxidation of ethane and ethylene 147

Palladium-magnesium/zeolites
Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy 81
Phase changes
Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties 193
Phenol
Influence of sulphur level on hydrodeoxygenation 41
Platinum-molybdena/silica
Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature 263
Platinum-rhenium/alumina
Hydrocarbon reforming on Pt-Re-S/Al_2O_3-Cl coked in a commercial reactor 249

Platinum/alumina
Enantioselective hydrogenation of α-keto esters: Temperature-programmed reduction study of liquid-phase Pt/Al_2O_3 hydrogenation catalysts 19
Pyrocatechol
Influence of sulphur level on hydrodeoxygenation 41

Radiotracers
Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts 69

Selectivity (acetone)

Conversion of ethanol to acetone over zinc oxide–calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism 237
Selectivity (BTX)
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker 1
Selectivity (ethene and ethane)
Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst. Factors effecting the rate of total oxidation of ethane and ethylene 147
Selectivity (hydrocarbons)
Product distributions of the Fischer–Tropsch synthesis on precipitated iron catalysts 93
Selectivity (hydrocarbons)
Fischer–Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase change and catalytic properties 193
Selectivity (*N,N*-dimethyldodecylamine)
Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine 171
Selectivity (nitrogen)
Structure and selectivity changes in vanadia–titania catalysts used to promote the reduction of nitric oxide with ammonia 225
Silica–alumina
Deactivation of silica–alumina catalyst during the cumene cracking reaction 115
Sintering
Effect of calcination atmosphere on CuO/γ-Al_2O_3 catalyst for carbon monoxide oxidation 157
Sintering
Thermal stability of Co–Mo/Al_2O_3 hydrodesulphurization catalyst 181
Sintering
Structure and selectivity changes in vanadia–titania catalysts used to promote the reduction of nitric oxide with ammonia 225
Sodium oxide doping
Effect of sidum oxide-doping on surface and catalytic properties of CuO/Al_2O_3 solids 33
Spillover
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker 1
Steric effects
Influence of sulphur level on hydrodeoxygenation 41
Steric effects
Catalytic hydrogenolysis of heteroatom-substituted benzenes 57
Surface area
Effect of sodium oxide-doping on surface and catalytic properties of CuO/Al_2O_3 solids 33
Syngas conversion
Product distributions of the Fischer–Tropsch synthesis on precipitated iron catalysts 93
Syngas conversion
Fischer–Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties 193
Syngas conversion
Interaction of cabon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature 263

Thiophene hydrodesulphurization
Thermal stability of Co–Mo/Al_2O_3 hydrodesulphurization catalyst 181
Thiophene hydrodesulphurization
Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt–molybdenum catalysts. Comparison of alumina-, silica–alumina- and titania-supported catalysts 211

Vanadia–titania
Structure and selectivity changes in vanadia–titania catalysts used to promote the reduction of nitric oxide with ammonia 225
Veratrole

Influence of sulphur level on hydrodeoxygenation 41

Zeolites
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker 1

Zeolites
Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy 81

Zeolites
Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" 165

Zeolites
Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" 169

Zinc oxide-calcium oxide
Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism 237